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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/092,772	03/07/2002	Mark Melvin Butterworth	MP0973(13036/14	2557

60537 7590 04/17/2007  
BRINKS HOFER GILSON & LIONE/MARVELL  
P.O. BOX 10395  
CHICAGO, IL 60610

EXAMINER
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PERUNGAVOOR, SATHYANARAYA V

ART UNIT	PAPER NUMBER
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2624

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/17/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/092,772	BUTTERWORTH, MARK MELVIN	
	<b>Examiner</b>	<b>Art Unit</b>	
	Sath V. Perungavoor	2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 06 March 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,4-7,9-13 and 15-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4-7,9-13 and 15-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Applicant(s) Response to Official Action***

- [1] The response filed on March 6, 2007 has been entered and made of record.

### ***Response to Arguments/Amendments***

- [2] Presented arguments have been fully considered, but are rendered moot in view of the new ground(s) of rejection necessitated by amendment(s) initiated by the applicant(s).

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Art Unit: 2624

[3] Claims 1, 4, 5, 7, 9, 10, 12, 13, 15 and 16 rejected under 35 U.S.C. 102(b) and 102(e) as being anticipated by Sakai<sup>i</sup> et al. ("Sakai").

Regarding claim 1, Sakai meets the claim limitations, as follows:

A method of processing a document that includes a plurality of characters [fig. 4], the method comprising: capturing a plurality of partially overlapping digital images (*i.e.* 1 and 2) of the document with an image capture device [fig. 8A and 8B; col. 5, ll. 39-46]; maintaining image sequence (*i.e.* first and second) information identifying a sequential order in which the partially overlapping images were captured [col. 5, ll. 39-46]; receiving direction information (*i.e.* reading direction) indicative of a direction of relative movement between the image capture device and the document during the capture of the plurality of partially overlapping digital images [fig. 32; col. 10, ll. 1-50; col. 24, ll. 1-5]; performing optical character recognition (*i.e.* s403 and s405) on the plurality of captured partially overlapping digital images (*i.e.* first and second image), to generate a corresponding plurality of electronic text files [fig. 4; col. 8, l. 62 col. 9, l. 5]; selecting two (*i.e.* first and second) of the plurality of electronic text files based on the sequence information [fig. 4]; and combining the two selected electronic text files (*i.e.* merging) into a combined text file based on the direction information (*i.e.* scanning direction) and based on a character sequence appearing in common (*i.e.* overlap) in the two selected electronic text files [col. 10, ll. 1-5 and 50-60].

Regarding claim 4, Sakai meets the claim limitations, as follows:

The method of claim 1, wherein the plurality of partially overlapping digital images are captured with a digital camera (*i.e.* handheld scanner), the method further

Art Unit: 2624

comprising: providing the direction information (*i.e. reading direction*) with a user input device of the digital camera [fig. 32; col. 24, ll. 1-5].

Regarding claim 5, Sakai meets the claim limitations, as follows:

The method of claim 1, wherein the plurality of partially overlapping digital images are captured with a digital camera (*i.e. handheld scanner*), the method further comprising: automatically detecting (*i.e. based on previous direction*) the direction information [col. 25, ll. 1-10].

Regarding claim 13, Sakai meets the claim limitations, as follows:

The image capturing apparatus of claim 12, wherein the image capturing apparatus is implemented in one of a cellular telephone, a personal digital assistant device, and a laptop computer [col. 1, ll. 52-55].

Regarding claims 7, 9, 10, 12, 15 and 16, all claimed limitations are set forth and rejected as per discussion for claims 1, 4 and 5.

[4] Claims 6, 11 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakai in view of Nakao<sup>ii</sup>

Regarding claim 6, Sakai discloses the claim limitations as set forth in claim 1.

Sakai does not explicitly disclose the following claim limitations:

Art Unit: 2624

The method of claim 1, wherein the plurality of digital images are captured automatically at a predefined time interval.

However, in the same field of endeavor Nakao discloses the deficient claim limitations, as follows:

The method of claim 1, wherein the plurality of digital images are captured automatically at a predefined time interval [col. 9, ll. 28-31].

Sakai and Nakao are combinable because they are from the same field of document imaging.

It would have been obvious to one with ordinary skill in the art at the time of invention to modify the teachings of Sakai with Nakao to automatically capture images in a predefined time interval, the motivation being ensure overlap among successive images [col. 9, ll. 28-31].

Regarding claims 11 and 17, all claimed limitations are set forth and rejected as per discussion for claim 6.

### ***Conclusion***

[5] Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be

Art Unit: 2624

calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

### ***Contact Information***

[6] Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mr. Sath V. Perungavoor whose telephone number is (571) 272-7455. The examiner can normally be reached on Monday to Friday from 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Matthew C. Bella whose telephone number is (571) 272-7778, can be reached on Monday to Friday from 9:00am to 5:00pm. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dated: April 10, 2007

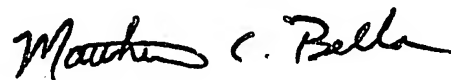
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<sup>i</sup> JP 2000278514, published on October 6, 2000, and US 7,194,144, published on March 20, 2007, Examiner uses the US application as a translation for the Japanese document.

<sup>ii</sup> US 6,459,819 B1

A handwritten signature in black ink, reading "Matthew C. Bella". The signature is fluid and cursive, with the first name "Matthew" being more prominent and the last name "Bella" following in a similar style.

MATTHEW C. BELLA  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600